

Atty's Docket:101195-24

With respect to the foregoing amendment, the following remarks should be considered.

- ▣ **New Matter** – The sequence added at the end of claim 1 has been deleted. Although the Applicants believe the sequence not to be new matter, it has been deleted to expedite prosecution of the application. The claims now require that the claimed oligonucleotide hybridizes to the telomerase's RNA component. As known in the art, and as described at the bottom of page 3 of the specification, the enzyme telomerase has an RNA component that is required for its function. Thus, claims directed toward oligonucleotides that hybridize to the RNA is not new matter.

The telomerase RNA is complementary to hexanucleotide repeats having the sequence 5'- TTAGGG-3'. This sequence is disclosed on the top of page 2. The now-deleted sequence included this same sequence, except that U was substituted for T. Therefore, the deleted sequence was not new matter.

Further, page 3 discloses that telomerase is a type of reverse-transcriptase that employs the RNA component as a template for repairing telomeric DNA.

In conclusion, it is suggested that previously amended claim 1 did not comprise new matter in view of the foregoing comments. However, the claim has been amended to remove the sequence and is in condition for allowance.

- ▣ **New Search** – The sequence of the telomerase RNA would not have required a new search. In view of the fact that function and structure of the RNA is to complement sequences present in the claimed oligonucleotides, the telomeric RNA would have been searched simultaneously upon searching the oligonucleotides.

In addition, the structures of claim 1 have been redrawn for convenience only. The redrawing does not introduce new matter.

CONCLUSION

The amendment to claim 1 submitted herewith is believed to satisfactorily address the issues raised in the office action.

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The sequence added in the previous amendment has been deleted by the instant amendment. The submission of the instant amendment is not in any way a concession to the correctness of the rejection/objection to the recitation of the now-deleted sequence.

Claims 1-11 should be examined on their merits.;

Should any further issues need to be clarified, the Examiner should not hesitate to contact the undersigned at the telephone or fax number provided.

Respectfully Submitted,

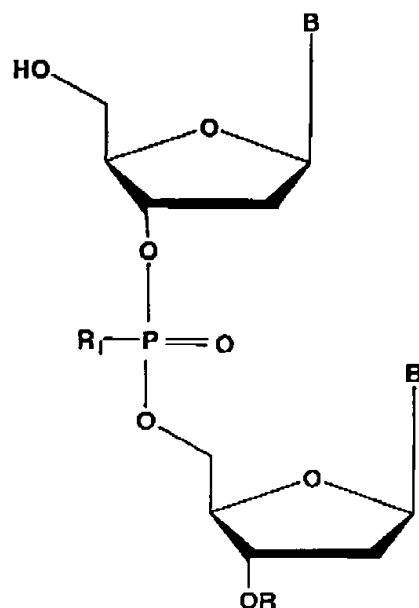
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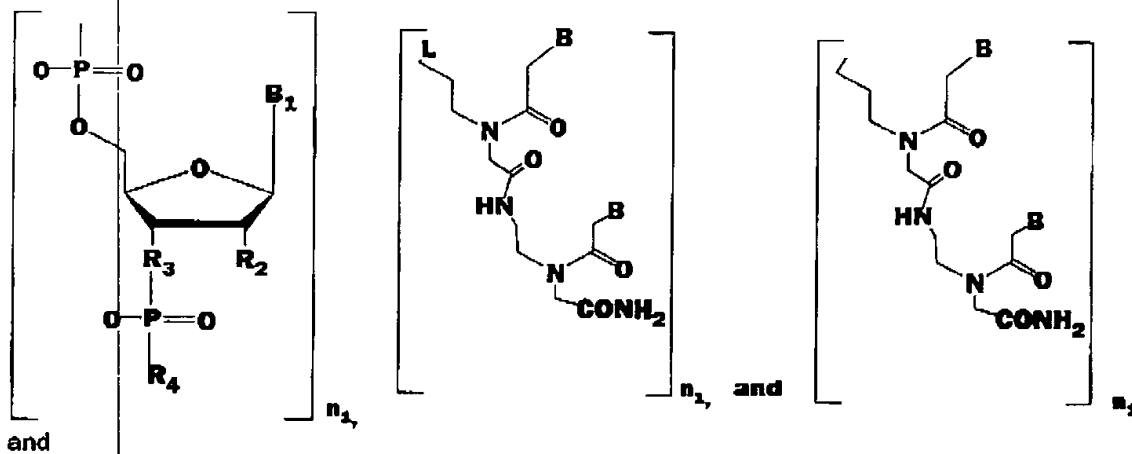
MARK UP OF THE AMENDED CLAIM

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1. (Amended twice) Chimeric oligonucleotides of the general formula I



wherein R is selected from the group consisting of



wherein

 $n > 10; \leq 20$ $R_1 = S, CH_3, O^-$

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B = thymine, cytosine, adenine, guanine

$n_1 > 3; \leq 17$

B₁ = thymine, cytosine, adenine, guanine, 5-propyluracile, 5-propylcytosine;

R₂ = H, F, NH₂, O-alkyl (C₁-C₆), O-allyl, O-methoxyethoxy,

R₃ = NH, O, provided that if R₃ = NH, R₂ = not NH₂, is O-alkyl (C₁-C₅), O-allyl, O-methoxyethoxy,

R₄ = 2', 3'-dideoxy-3'-fluoroguanosine, 2', 3'-dideoxy-3'-azidoguanosine, 2', 3'-dideoxy-3'-aminoguanosine, 2', 3'-epoxyguanosine, acyclovir, ganciclovir, 2'-deoxyadenosine, 2'-deoxyguanosine, 2'-deoxycytidine, 2'-deoxythymidine,

L = $-(PO_2)-OCH_2-COH-CH_2-NH-$ or $-(PO_2)-OCH_2-CH(CH_2COOH)-(CH_2)_4NH-$,

and wherein each chimeric oligonucleotide comprises a nucleotide sequence capable of hybridizing to the RNA component of the telomerase ~~an antisense a sequence 3'-CAAUCCGAAUC-5' (SEQ ID NO: 30), or a portion thereof.~~